Helmut Hofer
Publication List

Journal Articles:

(1) A multiplicity result for a class of nonlinear problems with applications to a nonlinear wave equation. Jour. of Nonlinear Analysis, Theory, Methods and Applications, 5, No. 1 (1981), 1-11


(3) A new proof for a result of Ekeland and Lasry concerning the number of periodic Hamiltonian trajectories on a prescribed energy surface. Bolletino UMI 6, 1-B (1982), 931-942


(7) On strongly indefinite functionals with applications. Transactions of the AMS 275, No. 1 (1983), 185-213

(8) A note on the topological degree at a critical point of mountainpass-type. Proc. of the AMS 90, No. 2 (1984), 309-315


(13) Free oscillations of prescribed energy at a saddle point of the potential in Hamiltonian dynamics (with J. Toland). Delft Progress Report 10 (1985), 238-249


(22) Sur les hypersurfaces convexes et leurs caractéristiques fermées. (with I. Ekeland), CRAS, Paris 304, Serie I (1987), 237-240


(28) Recent progress in symplectic geometry. Lectures in Pure and Appl. Math 121, 49-94 (Marcel Decker)
(38) Symplectic homology I: Open sets in $C^n$ (with A. Floer), Math. Zeit. 215 (1994), 37-88
(44) An energy–capacity inequality for the symplectic holonomy of hypersurfaces flat at infinity (with Y. Eliashberg). Symplectic

(45) *Floer homology and Novikov rings* (with D. Salamon). The Floer Memorial Volume, Progress in Math. Vol. 133, Birkhäuser


(47) *Unseen symplectic boundaries* (with Y. Eliashberg). Volume in honour of E. Calabi

(48) *Pseudoholomorphic curves in symplectisation with applications to the Weinstein conjecture in dimension three*. Inv. Math. 114(1993), 515-563

(49) *A Hamiltonian characterization of the three-ball* (with Y. Eliashberg). Journal of Differential and Integral Equations, Vol.7 No.5 (1994), 1303-1324


(54) *Symplectic invariants and Hamiltonian dynamics* (with E. Zehnder). The Floer Memorial Volume, Progress in Mathematics 133, Birkhäuser 1995


(67) Introduction to Symplectic Field Theory (with Y. Eliashberg and A. Givental), GAFA 2000, Special Volume, Part II, pp560-673

(68) Holomorphic curves and real three-dimensional dynamics, GAFA 2000, Special Volume, part II, pp674-704.


(77) *A General Fredholm Theory II: Implicit Function Theorems* (with K. Wysocki and E. Zehnder), GAFA Volume 19, Number 1,(2009),206-293.


Books: Mathematical

2. The Floer Memorial Volume (edited jointly with C. Taubes, A. Weinstein and E. Zehnder), Progress in Mathematics Vol. 133, Birkhäuser

Books: Non-mathematical

1. Innovation, Venture Capital, Arbeitsplätze (Edited jointly with A. Scheidegger and G. Scheuenstuhl, in German) Haupt Verlag

In Preparation:

2. Connections and Determinant Bundles for Polyfold Fredholm Operators (with K. Wysocki and E. Zehnder)
3. Polyfolds and Fredholm Theory I, (with K. Wysocki and E. Zehnder)
4. Applications of Polyfold Theory II: The Polyfolds of Symplectic Field Theory (with K. Wysocki and E. Zehnder)